

REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the above Amendment and the discussion below.

Claims 1, 4, 8-17 and 19 continue to be rejected under 35 U.S.C. § 103 as unpatentable over Savkar (U.S. Patent No. 5,047,612) in view of Hill et al. (U.S. Patent No. 5,633,123) while claims 6, 18 and 20 have been rejected under 35 U.S.C. § 103 as unpatentable over the above references and further in view of Bok et al. (U.S. Patent No. 5,171,613). Claims 2, 5, 21 and 22 have been objected to as being dependent upon a rejected base claim but allowable if rewritten in independent form.

In response to these rejection, Applicants respectfully submit that, contrary to the assertions in the "Response to Amendment" section at Item 1 on pages 2 and 3, the substance of Applicants' arguments for allowability over the proposed combination lies in the recitation of independent claim 1 concerning either the recording, controlling or monitoring of a characteristic of either a plasma jet or a particle flux.

Claim 1 precisely defines that it is recording, controlling or monitoring of images of high velocity or flying particles whereas the reference to Savkar concerns the recording of images of the layer which means that it is recording images of stationary particles. Similarly, independent claim 12 calls for recording, controlling, or monitoring of characteristics of a "thermal spray coating method." Claims 16 and 19 as addressed to computer product and program storage devices specifying

storage of values representing boundaries of intensity levels of the digital image and comparing these images with stored values for one or more geometrical surface regions. Additionally, claim 19 specifies a program for monitoring the quality of thermal spray coating.

Applicants submit that the remarks portion of the Amendment filed on November 3, 2003 at page 11 argued that "Savkar records images of the deposited layer and not the plasma jet." In response to this argument, the Examiner has indicated at page 3 of the present Office Action that col. 6, lines 24-55 show measuring plasma powder flow rate and carrier gas flow rates in the plasma spray process. However, the point of the argument concerning the distinctions between independent claims and the reference to Savkar is that the actual recording occurs on the layers after particles have stopped moving, whereas the present invention has for its objective an improved quality of the coating layer by monitoring or recording or controlling the spray coating method or in other words, the plasma jet or particle flux itself.

This is an important distinction because the rejection involves a combination of references and if the secondary references are to be combined with Savkar in the manner of the statement of rejection, Applicants' invention would not result because the purpose of Savkar is to record images of layers (0 velocity). In contrast, each of the independent claims of the present invention are concerned with the measurement of a spray of plasma jet or particle flux in order to improve the subsequent layer itself.

Additionally, the claimed data processing of independent claims 16 and 19 provide a very specific data processing series of steps concerning the storage of boundary values of the intensity level and comparing these values with predetermined stored values for a plurality of symmetric geometrical surface regions before choosing the closest match.

Therefore, it is submitted that the present invention defines subject matter that is not available from the references even if the references are combined. Additionally, one of the objects of the present invention is addressed to the exact features which define over the references of record, as discussed above with respect to the measurement of the spray characteristics.

Applicants also submit that Item 2 on page 4 of this Office Action contains an indication that there is an objection to the drawings based on Paper No. 11 whereas the Office Action Summary at Item No. 10 indicates that the drawings filed on November 3, 2003 were accepted. Therefore, it is submitted that there are no outstanding drawing requirements.

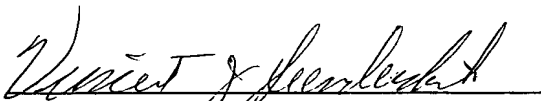
Applicants request that this application be allowed containing claims 1-22 and be passed to issue.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Serial No. 09/524,755
Amendment Dated: July 13, 2004
Reply to Office Action of April 13, 2004
Attorney Docket No. 218TG/48722

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #03873348722).

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Vincent J. Sunderdick", is written over a horizontal line.

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